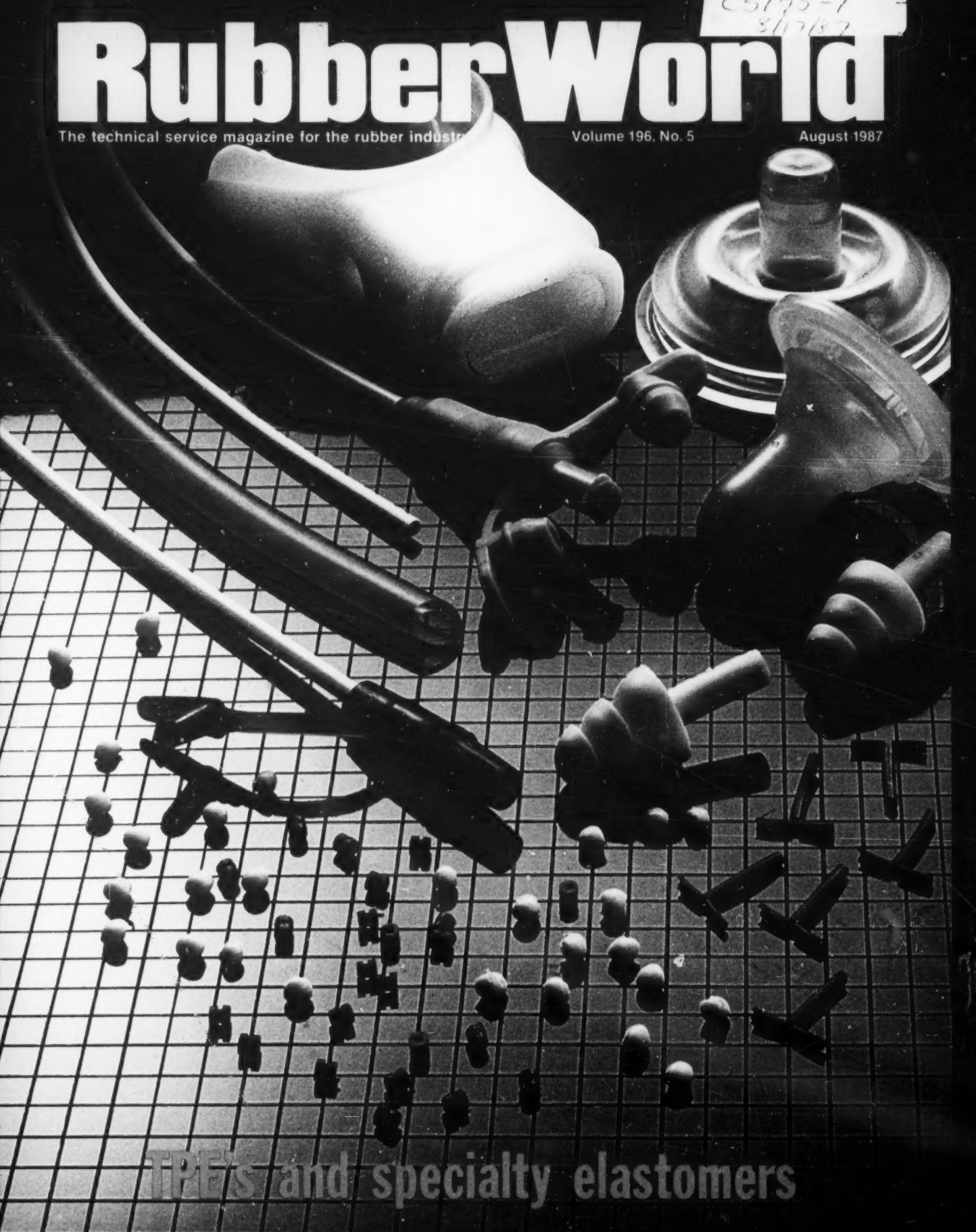
C5795-7
5/1787

RubberWorld

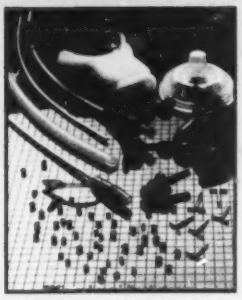
The technical service magazine for the rubber industr

Volume 196, No. 5

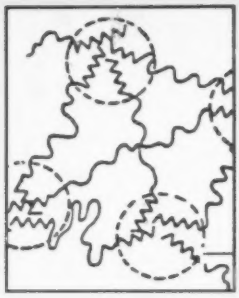
August 1987



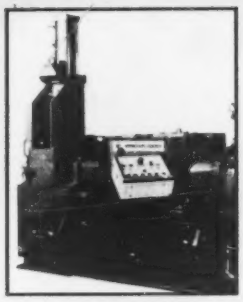
TPEs and specialty elastomers



Silicone modified TPEs p. 24



Styrenic TPEs p. 18



Techno Mart p. 44

5 Business Briefs
Acquisitions, expansions; contracts, licenses; financial statements; markets, news.

8 Tech Service: Getting rid of unwanted material
by Jon Menough, contributing technical service editor. This month's column looks at RapidPurge, a chemically acting purging compound which is reported to break down the molecular structure of residual thermoplastic resin left in the processing machine or tool.

10 Urethane Forum: World Congress will feature 162 papers
Papers by authors from 12 countries to be featured at the Polyurethane World Congress 1987 when it convenes September 29 in Aachen, West Germany are highlighted in this month's column.

18 Styrenic thermoplastic elastomers
by G. Holden, Shell Development Co. The author, a substantial scientific contributor to the field of styrenic TPEs from its beginning, puts 25 years of spectacular growth in perspective.

24 New silicone modified TPEs for medical applications
by Richard Deisler and Ed Perrin, Concept Polymer Technologies, Inc. This article describes an important development in thermoplastic elastomers wherein polyvinyl siloxane polymers are blended to obtain unique properties for medical applications.

27 Compounding and applications of ENR
by C.S.L. Baker and I.R. Gelling, Malaysian Rubber Producers' Research Association, and Khairil Anuar b Abdullah and M.G. Smith, Kumpulan Guthrie Sendirian Berhad. The authors describe a new and special balance of properties obtainable from epoxidizing natural rubber.

32 A new class of high performance polysulfide polymers
by Hakam Singh, Products Research & Chemical Corp. Chemical modification of liquid polysulfide polymers has created a new class of hybrids which exhibit many properties superior to their precursors.

44 Techno Mart
New equipment, instruments, CAD/CAM, products and materials

51 Patent News
edited by Bob Samples, Akron Rubber Development

Departments

4 Editorial
38 Meetings
42 Calendar
52 Jobs & People
54 Literature
56 Ad Index

Cover

Cover photo courtesy of Concept Polymer Technologies, Inc.

A Lippincott & Peto Publication

Business Briefs

Adhesives Consultants, Hayward, CA will distribute **Henkel Polymers'** line of high performance thermoplastic polyamides.

Arco Chemical is forming a joint venture in Indonesia with **P.T. Gema Supra Abadi** to manufacture and market polyether polyols. A 44 million pound per year plant will be constructed on the island of Java.

The Mearl Corp., New York, NY has added **C.L. McGuire Co.**, Louisville, KY and **I.T. Bauman Co.**, St. Louis, MO as representatives for its pigments and colors.

BFGoodrich received a $2 million contract from the **U.S. Air Force** to supply surge boots used in the refueling booms of tanker aircraft.

RTP Co., Winona, MN, named the **Plastic Service Centers** as a representative for its reinforced and specialty modified thermoplastics.

RMA rubber report through April (figures expressed in metric tons)

	YTD 1987	YTD 1986	% change
Total new rubber			
New rubber available	1,122,901	1,071,372	4.81
Imports	390,688	394,650	-1.00
Exports	163,388	132,288	23.51
Apparent consumption	950,163	916,945	3.62
Total natural rubber			
Imports	295,954	302,524	-2.17
Exports	12,287	14,635	-16.04
Apparent consumption	278,919	284,472	-1.95
%total new rubber	29.35	31.02	
Total synthetic rubber			
Production	732,213	676,722	8.20
Imports	94,734	92,126	2.83
Exports	151,101	117,653	28.43
Apparent consumption	671,243	632,472	6.13
Total SBR			
Production	284,958	259,299	9.90
Imports	28.004	37,204	-24.73
Exports	58,508	30,716	90.48
Apparent consumption	259,829	258,966	.33
Total nitrile			
Production	23,674	20,301	16.61
Imports	4,586	3,832	19.68
Exports	4,158	3,185	30.55
Apparent consumption	22,493	21,652	3.88
Polybutadiene			
Production	124,780	122,777	1.63
Imports	30,043	18,345	63.77
Exports	21,066	8,478	148.48
Apparent consumption	131,375	119,796	9.67
Ethylene-propylene			
Production	87,003	76,298	14.03
Imports	2,203	1,511	45.80
Exports	15,933	15,891	.26
Apparent consumption	68,513	62,044	10.43
Butyl, polychloroprene, polyisoprene, silicone and other synthetic elastomers			
Production	211,798	198,048	6.94
Imports	29,898	31,234	-4.28
Exports	51,436	59,383	-13.38
Apparent consumption	189,034	170,016	11.19

Financial statements

Armtek Corp. had a net income of $6.7 million for the third quarter on sales of $316.7 million.

Bridgestone reported 1986 net earnings of $379.9 million on sales of $4.9 billion

Carlisle Companies reported second quarter net earnings of $5 million on sales of $138 million.

Cooper Tire & Rubber had a second quarter net income of $7.3 million on sales of $164.3 million.

Eagle-Picher reported second quarter net income of $10.5 million on sales of $173.5 million.

Essex Chemical had a second quarter net income of $1.6 million on sales of $59.5 million.

GenCorp reported second quarter net income of $187 million on sales of $450 million.

BFGoodrich reported second quarter net income of $38.3 million on sales of $551.1 million.

Goodyear's net income for the second quarter was $141 million on sales of $2.56 billion.

M.A. Hanna Co. reported second quarter net income of $8.9 million on sales of $55.3 million.

RMA tire report through April (figures in thousands of units)

Passenger tires	YTD '87	YTD '86	% change
Shipments			
original equipment	19,747	19,419	1.69
radial	16,695	16,248	2.75
replacement	44,295	42,649	3.86
radial	39,250	36,460	7.65
export	1,712	1,366	25.33
radial	1,486	1,052	41.25
total	65,754	63,434	3.66
radial	57,431	53,760	6.83
Production	56,525	54,483	3.75
radial	48,973	45,865	6.78
Truck & bus tires			
Shipments			
original equipment	2,654	2,394	10.86
radial	1,867	1,583	17.94
replacement	10,295	9,523	8.11
radial	5,386	4,473	20.41
export	610	463	31.75
radial	426	281	51.60
total	13,559	12,380	9.52
radial	7,679	6,337	21.18
Production	11,359	10,792	5.25
radial	6,121	5,175	18.28